



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
NOVEMBER 5, 1998, 9:00 A.M.
EXECUTIVE CONFERENCE ROOM**

Present: G. D. Taylor J. D. Culp C. Roberts
 J. D. O'Doherty T. E. Davies G. Etelamaki (P. F. Miller)
 J. W. Reincke T. Fort G. Mayes (M. H. Frankhouse)
 S. Bower

Guest: D. L. Smiley C. Libiran

OLD BUSINESS

1. **Approval of the Minutes of the September 10, 1998, Meeting - G. D. Taylor**

Minutes of the September 10, 1998, meeting were approved as written.

2. **Bituminous Advisory Committee's Recommendations on the Pavement Sealants Corporation's Presentation on a Life Cycle Cost Analysis of Styrene Butadiene Rubber Latex Modified Asphalt Cement - G. Mayes**

Gary Mayes reviewed our policy regarding latex (SUPERPAVE does not specify which modifier to use). The supplier is aware of our policy.

ACTION: Gary will prepare a summary from the Bituminous Advisory Committee's review for discussion at the December 3, 1998, EOC meeting.

3. **Preventative Maintenance Review Team - S. Bower**

The review team is still working on this issue - to develop guidelines for use by the regions in setting up the 2000 Preventative Maintenance Program. Steve will bring the draft guidelines to the December EOC meeting.

NEW BUSINESS

1. **Implementation of a "Paver Placed Surface Treatment" Referred to as NovaChip - C. Roberts/L. Galehouse**

NovaChip is a preventative maintenance technology that has been used and proven in Europe. The Bituminous Advisory Committee reviewed one project in the city of Jackson. It is being introduced in the United States and was used on a series of local government

projects around Michigan. It was used successfully on projects in New York, New Jersey, and Pennsylvania. .

NovaChip is a paver placed surface treatment that is similar to microsurfacing. It seals the existing fine cracks immediately ahead of placement. One of its advantages is that traffic can be returned within 10 to 15 minutes, compared to 3 to 4 hours for microsurfacing.

ACTION: The Maintenance Division will develop a program to try NovaChip on up to four projects in 1999, contingent on Tom Maki's review and approval.

2. **Research Report, *Development of a Crash Reduction Model for Horizontal Curves* - J. D. O'Doherty**

The research report was prepared by Michigan State University. The purpose of the study was to analyze horizontal curve crashes on two-lane trunklines and to develop procedures to identify the attributes of curved road segments corresponding to the crash rates on curves. The study also identifies curves that exhibit crash rates significantly higher than the mean for their particular group.

John reviewed the six basic conclusions and corresponding recommendations. The predictive model is acceptable as it identifies problem curves. Most frequent problem curves: ones with a large radius and a short length.

ACTION: The report is accepted and will be published and distributed by the Traffic and Safety Division.

3. **SUPERPAVE Bituminous Mixture Usage on 1999 Projects - S. Bower**

The item was tabled until the December meeting. Steve will provide recommendations and a request for action at the next meeting.

4. **Work Plan 146 for M-46, Carsonville to Port Sanilac, Whitetopping Demonstration Project, C.S. 74062/38023 and 47172 - D. L. Smiley**

Dave reviewed the work plan and the background material for this demonstration project, which has been used successfully in several other states. It is an alternative rehabilitation fix for flexible or composite pavements.

The project scope includes concrete whitetopping and concrete inlay treatments, in addition to typical bituminous fixes. The project evaluation will measure the cost-effectiveness of each treatment under similar traffic, soil, and environmental conditions.

ACTION: The proposed research project is approved.

5. **Design Standards - C. Libiran**

Growing public interest in community friendly designs and the acquisition of local routes by “rationalization” necessitates the department’s development of alternative standards. A committee was formed to study flexibility in design standards. Representatives from Design, Traffic and Safety, the Bay Region, Local Agency Programs, and the FHWA participated. The department has traditionally taken a conservative approach to design. Design publications from AASHTO, FHWA, and TRB offer flexible alternatives in developing designs appropriate for a project’s environment. The ad hoc committee developed new 3R guidelines for non-NHS routes based on national design guidelines and 3R guidelines from neighboring states.

ACTION: The EOC approved the guidelines. Prior to implementation, Gary Taylor will discuss with Tom Maki the presentation of this intended action to the State Transportation Commission. Carlos Libiran will give a presentation of the new guidelines at the Region Project Development Engineers Meeting in Clare. Carlos Libiran will also make a presentation to our design consultants at the December 2, 1998, ACEC meeting. Since the new 3R non-NHS guidelines will have some effect on the format of the current 3R NHS guidelines, Tom Fort asked for written notification to FHWA. Carlos will draft a letter for Gary Taylor’s signature.

(Signed Copy on File at C&T/Secondary)
Jon W. Reincke, Secretary
Engineering Operations Committee

JWR:kat

cc: EOC Members
Region Engineers

J. R. DeSana	R. J. Risser, Jr. (MCPA)	G. L. Mitchell	B. Richter
R. J. Lippert, Jr.	A. C. Milo (MRBA)	J. Ruskowski	R. D. Till
D. L. Smiley	J. Becsey (MAPA)	C. Libiran	M. Frierson
M. Nystrom (AUC)	D. Hollingsworth (MCA)	G. J. Bukoski	C. W. Whiteside
M. Newman (MAA)	J. Steele (FHWA)	K. Rothwell	M. P. Krause